

Application Number 10/687,296
Amendment in response to Office Action mailed October 5, 2007

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

Claims 1-9 (Canceled)

Claim 10 (Previously Presented): A monitoring device for monitoring at least one physiological parameter at an attachment site in a body, comprising:

a housing, having a tissue attachment surface, wherein the housing comprises a concavity and the tissue attachment surface is a surface within the concavity;

a securing structure for securing the monitoring device which allows the tissue attachment surface to be brought into contact with tissue at a preselected attachment site when in a retracted position, and is movable to an extended position in which it extends through tissue in contact with the attachment surface; and

at least one physiological parameter detector ~~carried by~~ at least one of on or within the housing.

Claim 11 (Canceled).

Claim 12 (Previously Presented): A monitoring device as in Claim 10, wherein the securing structure comprises a bioabsorbable material.

Claim 13 (Original): A monitoring device as in Claim 11, further comprising a lumen in communication with the concavity, for connection to a vacuum to draw tissue into the concavity.

Claim 14 (Original): A monitoring device as in Claim 10, wherein the physiological parameter detector comprises a pH detector.

Application Number 10/687,296
Amendment in response to Office Action mailed October 5, 2007

Claim 15 (Original): A monitoring device as in Claim 10, further comprising an RF transmitter for transmitting data generated by the physiological parameter detector.

Claim 16 (Original): A monitoring device as in Claim 10, further comprising an electrical contact for contacting tissue in the body and transmitting data relating to the physiological parameter through the tissue.

Claims 17-54 (Canceled).

Claim 55 (Previously Presented): A monitoring device as in Claim 10, wherein the securing structure comprises a pin.

Claim 56 (Previously Presented): A monitoring device as in Claim 11, wherein the securing structure extends at least part way across the concavity when in the extended position.

Claim 57 (Previously Presented): A monitoring device as in Claim 11, wherein the securing structure includes a distal end, and the concavity includes a blind end to receive the distal end of the securing structure when the securing structure is in the extended position.

Claim 58 (Previously Presented): A monitoring device as in Claim 57, wherein the blind end includes a locking structure to retain the securing structure in the extended position.

Claim 59 (Previously Presented): A monitoring device as in Claim 11, further comprising a window that permits visualization of the interior of the concavity through the housing.

Claim 60 (Previously Presented): A monitoring device as in Claim 59, wherein the window comprises a transparent wall of the housing.

Claim 61 (Previously Presented): A monitoring device as in Claim 10, wherein the preselected attachment site is an esophagus.

Application Number 10/687,296
Amendment in response to Office Action mailed October 5, 2007

Claim 62 (Previously Presented): A monitoring device as in Claim 10, wherein the housing includes a docking structure that permits removable attachment of the monitoring device to an introduction instrument that introduces the monitoring device to the preselected attachment site.

Claim 63 (Previously Presented): A monitoring device as in Claim 62, wherein the docking structure comprises at least one of a threaded aperture, a projection, a lumen, and a recess.

Claim 64 (Previously Presented): A monitoring device as in Claim 14, wherein the pH detector comprises one of an ion sensitive field effect transistor (ISFET) and an antimony electrode.

Claim 65 (Previously Presented): A monitoring device for monitoring at least one physiological parameter at an attachment site in a body, comprising:

- a housing comprising a concavity such that a tissue attachment surface is on a surface within the concavity;
- a securing structure for securing the monitoring device;
- a lumen in communication with the concavity, for connection to a vacuum to draw tissue into the concavity to engage the securing structure; and
- at least one physiological parameter detector ~~carried by~~ at least one of on or within the housing.

Claim 66 (Previously Presented): A monitoring device as in Claim 65, wherein the securing structure comprises a pin that allows the tissue attachment surface to be brought into contact with tissue when in a retracted position, and is movable to an extended position in which it extends through the tissue in contact with the attachment surface.

Claim 67 (Previously Presented): A monitoring device as in Claim 65, wherein the securing structure comprises a bioabsorbable material.

Application Number 10/687,296

Amendment in response to Office Action mailed October 5, 2007

Claim 68 (Previously Presented): A monitoring device as in Claim 66, wherein the securing structure extends at least part way across the concavity when in the extended position.

Claim 69 (Previously Presented): A monitoring device as in Claim 66, wherein the securing structure includes a distal end, and the concavity includes a blind end to receive the distal end of the securing structure when the securing structure is in the extended position.

Claim 70 (Previously Presented): A monitoring device as in Claim 69, wherein the blind end includes a locking structure to retain the securing structure in the extended position.